Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20544

In the Matter of	)	
Updating the Reciprocal Compensation	)	**WC Docket No. 18-155**
Regime to Eliminate Access Arbitrage	)	

REPLY COMMENTS OF HD TANDEM

August 3, 2018

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I. SUMMARY AND INTRODUCTION

HD Tandem hereby submits these comments in reply to comments filed by parties in the above-captioned proceeding[1] in response to the request by the Federal Communications Commission ("FCC" or "Commission") for comments on ways to eliminate opportunities for arbitrage within the intercarrier compensation ("ICC") system for the benefit of consumers.

The record in this proceeding reveals widespread agreement that the FCC must take steps to complete the work that it started in the *Transformation Order*,[2] but suggests varying recommendations on how to do so. In its initial comments, HD Tandem described, in some detail, its network deployment and interconnection capabilities as an intermediate carrier. As the only intermediate carrier supporting a *reciprocal*, bill-and-keep regime in its initial comments, HD Tandem offers a unique perspective in this regulatory debate and would like to reiterate its support for a comprehensive and consistent application of rules for all similarly situated providers.

If the Commission endorses incomplete or one-sided proposals and half-steps, it will have created a patchwork system of different types of access charges (e.g, access stimulation, non access stimulation, 8YY, intra-MTA, CMRS access, etc.) and stripped benefits for some carriers, while preserving the incentives for other carriers to collect and share access revenues. Furthermore, the FCC will essentially be picking winners and losers by defining new types of access with new and different pricing treatments, which will only engender confusion to the detriment of the public interest. Such confusion, or regulatory uncertainty, will assuredly lead to self-help, disputes, further litigation and regulatory uncertainty.

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[1] *In the Matter of Updating the Intercarrier Compensation Regime to Eliminate Access Arbitrage*, WC Docket No. 18-155 (June 5, 2018) ("*Access Arbitrage NPRM*").
[2] *Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17,663 (2011) ("*Transformation Order*").

In contrast, HD Tandem encourages the FCC to consider straightforward and clear regulations that close the door on any available regulatory loopholes. As some commenters properly recognize, any solution that relies on discrete, novel definitions of carrier traffic will not move the industry toward a solution but rather "discriminate against one specific type of traffic."[3] In particular, requiring the reversal of access charge payments would create a novel definition of a new type of traffic.[4] There is no compelling need or reason for the FCC to reverse access charge billing and economics, thereby suspending the labeled carrier from competition. Ultimately this will create arbitrage in the opposite direction as carriers seek different relationship structures that avoid the erstwhile 'access arbitrage' solution in favor of a structure that is compliant with whatever new boundaries the FCC creates in this docket.

Based on its review of the comments in this proceeding, HD Tandem believes that the FCC should broaden the definition of access stimulation to include all access charges and deliver a comprehensive solution. However, if the FCC declines to do so, HD Tandem supports, in the alternative, a narrow access arbitrage solution that specifically addresses the complaints raised in the record regarding local exchange carriers ("LECs") that use centralized equal access ("CEA") providers to connect to interexchange carriers ("IXCs").[5] Specifically, HD Tandem believes that in no case should a direct connection to a CEA tandem qualify as a sufficient direct connect for the purpose of the proposed rules.[6]

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[3] Comments of Competitive Local Exchange Carriers, WC Docket No. 18-155, at 52 ("CLEC Comments").
[4] *See* Comments of South Dakota Network, LLC, WC Docket No. 18-155, at 5 ("SDN Comments") (stating that such a regulatory change would only incentivize them to move the problematic traffic off their network so as to avoid being in the middle of disputing parties).
[5] *See* Access Arbitrage NPRM at ¶ 7.
[6] SDN Comments at 5 (asking "the Commission prohibit LECs engaged in access stimulation from utilizing a CEA tandem as a tandem provider").

In furtherance of its policy preference for IP-network deployment and efficient, direct interconnection, HD Tandem also believes that the Commission should consider a 252-like process to define offer and refusal. Then, and only then, can the Commission require companies to direct connect with full reciprocity so that competition can drive carrier costs toward marginal cost. Consumers will ultimately be the beneficiaries of the services that ride over those direct connections (*See* Appendix A for detailed discussion of the 252 process).[7]

II. A COMPREHENSIVE AND CONSISTENT REGULATORY APPROACH REMAINS THE PREFERABLE, EFFECTIVE AND EQUITABLE WAY TO ADDRESS ACCESS ARBITRAGE

A. A Comprehensive and Consistent Application of the Definition of Access Arbitrage Is Necessary

A review of initial comments demonstrates significant debate as to whom exactly any new "access arbitrage" rules should apply.[8] HD Tandem reiterates its position that a broad application of the rule is the best way to eliminate all opportunities for gamesmanship. As many commenters point out, much of the current debate may be attributed to narrow definitions in the *Transformation Order*.[9] Specifically, the rule adopted in 2011 did not cover CEA providers. If the FCC makes the same mistake again of targeting a rule too narrowly, we will likely find ourselves in a Groundhog Day situation in another 7 years.

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[7] As HD Tandem noted in its opening comments, the company recognizes that the 252 process was one focused on local competition and incumbent LECs and suggests that the FCC can apply this process to direct connections, refusals to deal, bad faith and the expectation that carriers will engage in direct interconnection negotiations when warranted. *See* Comments of HD Tandem, WC Docket No. 18-155, at 17 ("HD Tandem Comments").

[8] Comments of Peerless Network, Inc. and Affinity Network, Inc. d/b/a ANI Networks, WC Docket No. 18-155, at 10; Inteliquent Comments at 7; ITTA Comments at 6.

[9] *See, e.g.,* Comments of AT&T at 19; CLEC Comments at 61.

Many initial commenters discuss various business models that could be coined "access stimulation."[10] While the technical definition of a switched access service might be clear to those in the industry, it is the varying relationships between the carriers in the call path that have led the FCC in the past to label some of these arrangements as "access stimulation" and "arbitrage" while other industry relationships are able to escape agency scrutiny.

Similarly, it seems that some commenters would suggest that different flavors of the same consumer offering are determinative of who should fall under the "access stimulation" label. For example, according to Wainhouse Research, more than 50% of business phone time is captured by callers who are participating in a conference call.[11] Wainhouse also forecasts future growth in this product segment. The conferencing consumer has a choice between paying or not paying for 2 types of dial-in access to conference calling services.

- **Toll free** – where the organizer pays for all long distance costs for the participants calling the dial-in toll free number.
- **Caller Paid a.k.a. Call Me conferencing** – where each of the participants call into the conferencing service using their long distance calling plan. In Caller Paid conferencing, the calling party's long distance carrier pays access fees to reach the conferencing platform. There are two types of Caller Paid:
    - **Paid** – where the conference call company charges the organizer either a flat rate for a specified number of participants, or a per minute fee for each participant while connected to the conference.

[10] *See, e.g.,* Comments of Teliax, Inc., WC Docket No. 18-155, at 12, 17; Comments of Wide Voice LLC, WC Docket No. 18-155 at 2, 3; CLEC Comments at 33.
[11] https://www.businesswire.com/news/home/20180314005715/en/FreeConferenceCall.com-Ranks-Top-Global-Audio-Conferencing-Providers.

- **Free** – where there are no organizer fees for using the conferencing service – services such as FreeConferenceCall.com are the same Caller Paid conferencing service that ATT offers without the additional organizer fees – thus making it 'free' to the organizer.

According to Wainhouse Research, FreeConferenceCall.com is the **third** largest audio conferencing provider in the United States of America.[12] AT&T is ranked **second** in size by minute volume – demonstrating that AT&T has more conferencing minutes than FreeConferenceCall.com.[13] AT&T offers Paid Caller-Paid conferencing whereas FreeConferenceCall.com offers Free Caller-Paid conferencing. Why is the former considered access stimulation, but AT&T's service is somehow exempt from the access stimulation debate, when both are receiving access revenue?

Other commenters highlight the T-Mobile / Inteliquent partnership as an example of an access stimulation relationship. According to T-Mobile, the company designated Inteliquent as its homing tandem because Inteliquent, unlike the ILECs, offered T-Mobile access to tools for: (a) detecting and deterring unlawful robocalls and other fraudulent traffic, which typically are sent to a shifting set of multiple wholesale carriers; (b) facilitating the IP transition by converting traffic received in TDM format to IP format and; (c) improving overall quality of service.[14] While T-Mobile claims that they have realized remarkable success in all three areas, thanks in part to its working relationship with Inteliquent, determining whether a net payment exists under the access stimulation rule, all payments, discounts, credits, services, features, functions, and other items of value, regardless of form, provided by the rate-of-return local exchange carrier or

[12] *Id.*
[13] *Id.*
[14] Comments of T-Mobile USA, Inc., WC Docket No. 18-155, at 6 ("T-Mobile Comments").

Competitive Local Exchange Carrier to the other party to the agreement is taken into account under the FCC's current approach.[15] However, T-Mobile asserts that "its working relationship" with Inteliquent should not fall into the access stimulation category because it does not receive any 'revenue share' from Inteliquent.[16] The reality is that this industry partnership is a relationship where value, or some form of consideration, is exchanged. The Commission could therefore reasonably find that any relationship, in which consideration is likewise exchanged, in any form, is akin to a revenue sharing relationship under the Commission's rules.

Rather than proceeding down the regulatory rabbit hole of debating over whom any new access arbitrage rules should apply to, the FCC should apply the same rules of the road to all similarly situated providers.[17] Such an interpretation will also assist to achieve the equally important goal of eliminating self-help.[18] In a recently-decided district court opinion, Judge Durkin awarded a judgement to Peerless, finding that Verizon had improperly engaged in self-help by withholding millions in payments to Peerless on the basis that Verizon did not have to pay because of the FCC's policies applicable to access stimulation.[19] This kind of loosely

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[15] *Transformation Order* at ¶ 9.

[16] T-Mobile Comments at 4.

[17] *See* Statement of Commissioner Ajit Pai on Congressional Resolution of Disapproval of FCC Broadband Privacy Regulations, March 28, 2017 (supporting Congress' passage of a congressional resolution of disapproval of the FCC's broadband privacy regulations stating that the previous FCC had "pushed through . . . privacy regulations designed to benefit one group of favored companies over another group of disfavored companies" and supporting the rejection of "this approach of picking winners and losers . . .").

[18] *See* Comments of Teliax, Inc., WC Docket No. 18-155, at 19 (urging the FCC to release a further NPRM that would consider a rule to "make self-help by a carrier withholding payment of tariff charges billed by another carrier an unjust and unreasonable act"). HD Tandem agrees with Teliax that the FCC should conduct a further inquiry into industry self-help practices that negatively affect the public interest.

[19] *Peerless Network, Inc. v. MCI Communs. Servs.,* No. 14C7417, 2018 U.S. Dist. LEXIS 125573, at *17-18 (N.D. Ill. July 27, 2018).

interpreted policy coupled with carrier self-help will have even more damaging effects if the FCC imposes the reversal of access charge payments, which would have assigned responsibility to Peerless to pay the cost of receiving the traffic. Given the size of many carriers seeking to recover access payments from larger carriers, a loose definition and interpretation of access stimulation could be catastrophic. Ultimately, any rule that allows some providers to access stimulate without being subject to any different financial or regulatory requirements as others only creates new loopholes for carriers.[20]

If the FCC declines to implement a comprehensive and consistent application of the definition of access stimulation to all similarly situated providers, then, in the alternative, HD Tandem would support a narrow access stimulation solution that specifically addresses the complaints raised in the record regarding LECs that use CEA providers to connect to IXCs.

B. A Reciprocal, Nationwide Bill-and-Keep End State is Necessary to Eliminate Access Arbitrage

Review of the record also demonstrates consensus that a bill-and-keep end state would also eliminate arbitrage.[21] HD Tandem agrees that adopting a bill-and-keep end state would eliminate many opportunities for gamesmanship and provide necessary clarity once and for all. Contrary to those commenters that have suggested that any business model associated with conference lines is arbitrage, HD Tandem supports eliminating all loophole arbitrage opportunities through a national bill-and-keep policy.

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[20] Any rule, which relies upon affiliated/nonaffiliated structural separation (e.g. CenturyLink) without more, will provide an incentive for arbitrageurs to morph into similar affiliated/nonaffiliated relationships that may not allow the agency to fully address the problems it says it would like to address in the docket.

[21] *See, e.g.,* Comments of Verizon, WC Docket No. 18-155, at 1 ("Completing the transition to bill-and-keep would eradicate intercarrier compensation arbitrage").

Such a bill-and-keep end state, however, must be allowed to account for financial realities of deploying IP networks. HD Tandem, therefore, would embrace such a bill-and-keep end state for all elements of the call path so long as it is reciprocal. Asymmetrical, or non-reciprocal, bill-and-keep is just another form of arbitrage, where one carrier charges access but does not pay access (e.g. non-reciprocal). True bill-and-keep implies reciprocity because the costs and benefits of a relationship is either higher than the costs of billing or accounting for the difference in value and therefore parties find it more efficient to engage in a settlement-free, reciprocal interconnection relationship. In addition, and equally important, a true sustainable end state does not pick winners and losers by shifting costs unreasonably onto terminating carriers in such a way that the carrier will never make it to the end-state.[22] The end state should be about inclusion and not exclusion or suspension from the industry or broadband competition.

Just as the FCC has recognized in other contexts, the policy adopted in this docket must accommodate commercial negotiations. Commercial techniques, such as establishing offset rates where traffic is out of balance, enable providers who are closer to their commercial realities than the agency will achieve efficient outcomes. As the Commission moves toward an end state without implicit subsidies, the FCC should not be in the business of shifting costs around in a broken system. Rather, the FCC should complete the job of encouraging commercial negotiations that are analogous to the peering arrangements that characterize the Internet traffic exchange.

[22] *See* Remarks of Chairman Ajit Pai on Restoring Internet Freedom, (Nov. 28. 2017) at 5 ("We have no business picking winners and losers in their marketplace. A level playing field, not regulatory arbitrage, is what best serves consumers and competition").

III. THE COMMISSION SHOULD ESTABLISH A POLICY THAT SUPPORTS EFFICIENT DEPLOYMENT OF DIRECT, RECIPROCAL INTERCONNECTION

The record also demonstrates support for a direct connection policy framework. HD Tandem supports such a framework, but such direct connects should be reciprocal in nature. Specifically, if an intermediate provider connects directly with the end office LECs, then they should be likewise entitled to a reciprocal direct connect with the originating carrier.

Some initial commenters leveraged accusations that direct connections were refused at certain destinations without offering much detail regarding such refusals (other than to suggest that the geographies are sometimes rural and therefore more costly).[23] Based on HD Tandem's experience in the marketplace, it seems that such efforts to direct connect were lackluster at best, and, in reality, these commenters only used direct connect offers as a threat to negotiate outside of tariffed rates. Most of those carriers were seeking unfair, non-reciprocal connections in a relationship where all costs of what is essentially a duplexed connection were borne by the LEC asking to connect directly. It is therefore not surprising that these negotiations break down and reach impasse. HD Tandem's view is that these failed direct connect relationships are not indicative of carriers' efforts to eliminate arbitrage, but rather, are attempts to create an advantageous arbitrage situation it in the opposite direction.[24]

For the last five years, HD Tandem has used the *Transformation Order* as a guide to regulatory compliance. HD Tandem has also used the policies embodied in the *Transformation Order* as a means to advance innovation and arrive at a stable regulatory end point. HD Tandem's experience is that direct connections are necessary between two carriers not only to establish durable, mutually beneficial economics, but also to advance the transition from TDM

[23] *See, e.g.,* Comments of CenturyLink, Inc., WC Docket 18-155, at 3.
[24] *Id.* at 4.

facilities and toward IP-enabled networks. The biggest impediment in making this technology leap is establishing direct connections to the carriers sending traffic. As HD Tandem described in its initial comments, HD Tandem responded to these technological impasses by making alternative interconnection points available using HD enabled, IP convenient, geographically diverse, drop off points.[25] While HD Tandem has highlighted this success for the Commission, HD Tandem believes that these positive developments are only the tip of the iceberg. As such, as HD Tandem stated in its initial comments, HD Tandem could implement this model immediately as there are a number of carriers already connected to HD Tandem's Network, including, but not limited to, Verizon, CenturyLink and AT&T. Moreover, as another example of progress, HD Tandem was able to move significant traffic away from Aureon's legacy TDM network and upgrade the consumer experience to HD enabled IP connectivity over broadband.[26]

If the FCC fails to adopt a rule that properly incentivizes carriers to facilitate direct connections where no current direct relationships exist, it will have shifted a disproportionate share of the costs of operating local exchange networks from the IXC to the terminating LECs. The likely and unfortunate results will include an immediate stall in capital investment in local exchange facilities. In addition, the FCC will be creating an uneven playing field and tilting the bargaining table even further toward the incumbent IXC's favor. On the other hand, a truly symmetrical and reciprocal regime will ensure a beneficial equilibrium and market-based negotiations.[27]

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[25] HD Tandem Comments at 4-5.
[26] Moreover, as another example of working partnership, HD Tandem was able to move significant traffic from Aureon and established a stable, efficient connection relationship with Verizon, which has proven mutually beneficial to both carriers, and to the consumers they serve.
[27] See Comments of Wide Voice LLC, WC Docket No. 18-155 at 4.

Currently, an antiquated intercarrier compensation regime governs our nation's voice system. Voice as we know it is shifting, and traffic imbalances will become the norm. Applications will become the primary method consumers use to communicate. If we simply shift costs around, we will only hinder innovation in the network. If a carrier had the economics reversed on them and then decided to direct connect with originating carriers with reciprocity – there would be no incentive for the originating carriers to direct connect because the reversal of economics is a punishment to terminating carrier and is the antithesis of a reasonable solution like reciprocity[28]

IV. HD TANDEM'S INTERNET PROTOCOL HOMING TANDEM PROPOSAL OFFERS AN IMMEDIATE SOLUTION.

As described in other filings in related dockets, HD Tandem has proposed that IP Homing Tandem network architectures operate at the center of innovation platforms that interoperate and interconnect broadband and TDM networks.[29]

Cooperation and participation in this innovation platform, including default notions of bill-and-keep interconnection, reciprocity and commercial negotiations can work better and address all of the problems identified in the Access Stimulation NPRM. Many commenters have suggested elaborate transitions to address the FCC's proposals in this docket. HD Tandem submits that no elaborate transitions are necessary if the FCC endorses HD Tandem's proposed Internet Protocol Homing Tandem ("IPHT") solution. HD Tandem could implement this practical solution tomorrow with no transition needed.

[28] *See* Comments of Iowa Network Services, WC Docket No. 18-155 at 5, 19 (describing the practical problems posed by reversal of charges).
[29] HD Tandem Comments at 5.

V. CONCLUSION

HD Tandem has been a consistent supporter of policies that enable consumers to experience the benefits of communications applications that ride on top of access networks. It is no longer debatable that these applications are where consumer-driven innovation is happening.

Instead of an industry deploying its resources and attention to arguing whether they fall inside or outside of the Commission's rules, it should focus on assisting the FCC in adopting policies that bring about an IP future. These include support for commercial negotiations and efficient, fair market outcomes; symmetrical; reciprocal compensation rules; and the policing of the exercise of market power in commercial negotiations. Without reciprocity and a clear-eyed goal of ever-faster broadband facilities, the Commission risks adopting rules, which will retain an incentive to operate TDM infrastructure.

In the end, the consumer has spoken and free conferencing calling products are here to stay. As demand increases and free conferencing products continue to replace products that no longer delight consumers, consumers will benefit each time they initiate a call to applications connected via HD Tandem's platform.

Respectfully submitted,

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Dave Erickson
CEO
HD Tandem

Appendix A

Interconnection Negotiations

Background. The Telecommunications Act of 1996 ("Act") established the framework for negotiation of interconnection agreements with local exchange carriers. Section 251(a) establishes a general duty of all telecommunications carriers "to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers." All local exchange carriers (ILECs and CLECs) have a further obligation "to establish reciprocal compensation arrangements for the transport and termination of telecommunications." 47 U.S.C. § 251(b)(5). Incumbent LECs have added obligations to negotiate in good faith, interconnect at technically feasible points, provide access to unbundled network elements, and provide resale and collocation. 47 U.S.C. § 251(c). The Act also establishes a process for negotiation of interconnection agreements, arbitration of unresolved issues, and approval by state commissions under Section 252 of the Act. This process is triggered by a request for interconnection under Section 251, but carriers can also negotiation interconnection arrangements outside of the Section 251/252 process, which is the typical process for non-ILEC interconnection negotiations.

Requests for interconnection are typically made by competitive carriers to an ILEC, but there is a FCC decision that interprets the statutory language to allow both ILECs and CLECs to initiate an interconnection request and the statutory requirements for negotiation and interconnection.

After passage of the 1996 Act, several parties made interconnection requests under the Act, which lead to arbitrations before more than 15 state commissions and the first reciprocal compensation agreements between wireless carriers and ILECs). The Section 251/252 interconnection negotiations process can be advantageous to a competitive carrier because it levels the playing field and establishes timeline for negotiations and establishment of interconnection agreements.

Statutory Language. The statutory language is clear on the requirements for interconnection, negotiation, and, if unsuccessful, arbitration. Section 252(a) of the Act declares that "[u]pon receiving a request for interconnection, services, or network elements pursuant to section 251 of this title, an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier." 47 U.S.C. § 252(a)(1). Section 252(b) then provides that "[d]uring the period from the 135th to the 160th day (inclusive) after the date on which an incumbent local exchange carrier receives a request for negotiation under this section, the carrier or any other party to the negotiation may petition a State commission to arbitrate any open issues." 47 U.S.C. § 252(b)(1). Section 252(e) states that "[a]ny interconnection agreement ["ICA"] adopted by negotiation or arbitration shall be submitted for approval to the State commission. A State commission to which an agreement is submitted shall approve or reject the agreement, with written findings as to any deficiencies." 47 U.S.C. § 252(e)(1).

The FCC has adopted rules and orders implementing the interconnection provisions of the Act in Part 51 of its rules (these rules apply to non-access telecommunications traffic; access traffic is governed by Part 69 of the FCC rules). The FCC has interpreted the statutory provisions to apply to negotiations initiative by an ILEC or a CLEC. "Although section 252(a)(1) and section 252(b)(1) refer to requests that are made to incumbent LECs, we find that

in the interconnection amendment context, either the incumbent or the competitive LEC may make such a request." In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, 18 F.C.C.R. 16978, 17405 ¶ 703 n.2087 (2003), vacated in part and remanded, U.S. Telecom Ass'n v. FCC, 359 F.3d 554, 594 (D.C. Cir. 2004). The language "in the interconnection amendment context" would appear to limit the right of CLECs to initiate a request for interconnection with ILECs to amendments to existing agreements. Not addressed by the FCC is whether a CLEC an initiate a request for interconnection under Sections 251 and 252 of the Act with a non-ILEC, such as an interexchange carrier ("IXC") or another CLEC. A recent court decision involving a request for interconnection by an ILEC to a CLEC did not specifically address whether a CLEC can make a request for interconnection under Sections 251 and 252 of the Act with an IXC.[1] While all telecommunications carriers have a duty to interconnect, directly or indirectly, with another telecommunications carrier pursuant to 47 U.S.C. § 251(a), it is not clear whether the negotiations and arbitration requirements of Section 252 apply to negotiations not involving an ILEC.

Making a request for interconnection. There are a few different approaches to interconnection negotiations. One approach is to make a request to negotiate an interconnection agreement under Section 251/252 and another approach is to make a more general interconnection request. To establish an interconnection arrangement between competitive carriers, it is typically done outside of the Section 251/252 process, but, if you make a request under Section 251/252, then the following outcomes are possible: (1) the other carrier may argue that the Section 251/252 does not apply and this issue may be presented to the state commission for resolution, (2) the parties agree to following the Section 251/252 process, or (3) the Section 251/252 process is initially followed with carriers making adjustments to the timelines in an attempt to reach an agreement without state commission involvement.

[1] *North County Communications Corporation of Arizona vs. Qwest Corporation*, Opinion, No. 14-35254, United States Court of Appeals for the Ninth Circuit, D.C. No. 3:13-cv-00375-BR, Filed May 31, 2016.

47 USC Section 251

(a) General duty of telecommunications carriers Each carrier has the duty—

(1) to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers; and

(2) not to install network features, functions, or capabilities that do not comply with the guidelines and standards established pursuant to section 255or 256 of this title.

(b) Obligations of all local exchange carriers Each local exchange carrier has the following duties:

(1) Resale The duty not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services.

(2) Number portability The duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission.

(3) Dialing parity The duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service, and the duty to permit all such providers to have nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays.

(4) Access to rights-of-way The duty to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms, and conditions that are consistent with section 224 of this title.

(5) Reciprocal compensation The duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications.

(c) Additional obligations of incumbent local exchange carriers In addition to the duties contained in subsection (b), each incumbent local exchange carrier has the following duties:

(1) Duty to negotiate The duty to negotiate in good faith in accordance with title the particular terms and conditions of agreements to fulfill the duties described in paragraphs (1) through (5) of subsection (b) and this subsection. The requesting telecommunications carrier also has the duty to negotiate in good faith the terms and conditions of such agreements.

(2) Interconnection The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network—

(A) for the transmission and routing of telephone exchange service and exchange access;

(B) at any technically feasible point within the carrier's network;

(C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and

(D) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title.

(3) Unbundled access The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

(4) Resale The duty—

(A) to offer for resale at wholesale rates any service that the carrier provides at retail to subscribers who are not telecommunications carriers; and

(B) not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of such telecommunications service, except that a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers.

(5) Notice of changes The duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

(6) Collocation The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.

(d) Implementation

(1) In general Within 6 months after February 8, 1996, the Commission shall complete all actions necessary to establish regulations to implement the requirements of this section.

(2) Access standards In determining what network elements should be made available for purposes of subsection (c)(3), the Commission shall consider, at a minimum, whether—

(A) access to such network elements as are proprietary in nature is necessary; and

(B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

(3) Preservation of State access regulations In prescribing and enforcing regulations to implement the requirements of this section, the Commission shall not preclude the enforcement of any regulation, order, or policy of a State commission that—

(A) establishes access and interconnection obligations of local exchange carriers;

(B) is consistent with the requirements of this section; and

(C) does not substantially prevent implementation of the requirements of this section and the purposes of this part.

(e) Numbering administration

(1) Commission authority and jurisdiction The Commission shall create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis. The Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States. Nothing in this paragraph shall preclude the Commission from delegating to State commissions or other entities all or any portion of such jurisdiction.

(2) Costs The cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission.

(3) Universal emergency telephone number The Commission and any agency or entity to which the Commission has delegated authority under this subsection shall designate 9–1–1 as the universal emergency telephone number within the United States for reporting an emergency to appropriate authorities and requesting assistance. The designation shall apply to both wireline and wireless telephone service. In making the designation, the Commission (and any such agency or entity) shall provide appropriate transition periods for areas in which 9–1–1 is not in use as an emergency telephone number on October 26, 1999.

(f) Exemptions, suspensions, and modifications

(1) Exemption for certain rural telephone companies

(A) Exemption Subsection (c) of this section shall not apply to a company until (i) such company has received a bona fide request for interconnection, services, or network elements, and (ii) the State commission determines (under subparagraph (B)) that such request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof).

(B) State termination of exemption and implementation schedule The party making a bona fide request of a rural telephone company for interconnection, services, or network elements shall submit a notice of its request to the State commission. The State commission shall conduct an inquiry for the purpose of determining whether to terminate the exemption under subparagraph (A). Within 120 days after the State commission receives notice of the request, the State commission shall terminate the exemption if the request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof). Upon termination of the exemption, a State commission shall establish an implementation schedule for compliance with the request that is consistent in time and manner with Commission regulations.

(C) Limitation on exemption The exemption provided by this paragraph shall not apply with respect to a request under subsection (c) from a cable operator providing video programming, and seeking to provide any telecommunications service, in the area in which the rural telephone company provides video programming. The limitation contained in this subparagraph shall not apply to a rural telephone company that is providing video programming on February 8, 1996.

(2)Suspensions and modifications for rural carriers A carrier with fewer than 2 percent of the Nation's subscriber lines installed in the aggregate nationwide may petition a State commission for a suspension or modification of the application of a requirement or requirements of subsection (b) or (c) to telephone exchange service facilities specified in such petition. The State commission shall grant such petition to the extent that, and for such duration as, the State commission determines that such suspension or modification—

(A) is necessary—

(i) to avoid a significant adverse economic impact on users of telecommunications services generally;

(ii) to avoid imposing a requirement that is unduly economically burdensome; or

(iii) to avoid imposing a requirement that is technically infeasible; and

(B) is consistent with the public interest, convenience, and necessity.

The State commission shall act upon any petition filed under this paragraph within 180 days after receiving such petition. Pending such action, the State commission may suspend enforcement of the requirement or requirements to which the petition applies with respect to the petitioning carrier or carriers.

(g) Continued enforcement of exchange access and interconnection requirements On and after February 8, 1996, each local exchange carrier, to the extent that it provides wireline services, shall provide exchange access, information access, and exchange services for such access to interexchange carriers and information service providers in accordance with the same equal access and nondiscriminatory interconnection restrictions and obligations (including receipt of compensation) that apply to such carrier on the date immediately preceding February 8, 1996, under any court order, consent decree, or regulation, order, or policy of the Commission, until such restrictions and obligations are explicitly superseded by regulations prescribed by the Commission after February 8, 1996. During the period beginning on February 8, 1996, and until such restrictions and obligations are so superseded, such restrictions and obligations shall be enforceable in the same manner as regulations of the Commission.

(h) "Incumbent local exchange carrier" defined

(1) Definition For purposes of this section, the term "incumbent local exchange carrier" means, with respect to an area, the local exchange carrier that—

(A) on February 8, 1996, provided telephone exchange service in such area; and

(B)

(i) on February 8, 1996, was deemed to be a member of the exchange carrier association pursuant to section 69.601(b) of the Commission's regulations (47 C.F.R. 69.601(b)); or

(ii) is a person or entity that, on or after February 8, 1996, became a successor or assign of a member described in clause (i).

(2)Treatment of comparable carriers as incumbents The Commission may, by rule, provide for the treatment of a local exchange carrier (or class or category thereof) as an incumbent local exchange carrier for purposes of this section if—

(A) such carrier occupies a position in the market for telephone exchange service within an area that is comparable to the position occupied by a carrier described in paragraph (1);

(B) such carrier has substantially replaced an incumbent local exchange carrier described in paragraph (1); and

(C) such treatment is consistent with the public interest, convenience, and necessity and the purposes of this section.

(i) Savings provision Nothing in this section shall be construed to limit or otherwise affect the Commission's authority under section 201 of this title.

47 U.S.C. Section 252

(a)Agreements arrived at through negotiation

(1) Voluntary negotiations Upon receiving a request for interconnection, services, or elements pursuant to section 251 of this title, an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251 of this title. The agreement shall include a detailed schedule of itemized charges for interconnection and each service or network element included in the agreement. The agreement, including any interconnection agreement negotiated before February 8, 1996, shall be submitted to the State commission under subsection (e) of this section.

(2) Mediation Any party negotiating an agreement under this section may, at any point in the negotiation, ask a State commission to participate in the negotiation and to mediate any differences arising in the course of the negotiation.

(b)Agreements arrived at through compulsory arbitration

(1) Arbitration During the period from the 135th to the 160th day (inclusive) after the date on which an incumbent local exchange carrier receives a request for negotiation under this section, the carrier or any other party to the negotiation may petition a State commission to arbitrate any open issues.

(2) Duty of petitioner

(A) A party that petitions a State commission under paragraph (1) shall, at the same time as it submits the petition, provide the commission all relevant documentation concerning—

(i) the unresolved issues;

(ii) the position of each of the parties with respect to those issues; and

(iii) any other issue discussed and resolved by the parties.

(B) A party petitioning a State commission under paragraph (1) shall provide a copy of the petition and any documentation to the other party or parties not later than the day on which the State commission receives the petition.

(3) Opportunity to respond A non-petitioning party to a negotiation under this section may respond to the other party's petition and provide such additional information as it wishes within 25 days after the State commission receives the petition.

(4) Action by State commission

(A) The State commission shall limit its consideration of any petition under paragraph (1) (and any response thereto) to the issues set forth in the petition and in the response, if any, filed under paragraph (3).

(B) The State commission may require the petitioning party and the responding party to provide such information as may be necessary for the State commission to reach a decision on the unresolved issues. If any party refuses or fails unreasonably to respond on a timely basis to any reasonable request from the State commission, then the commission may proceed on the basis of the best information available to it from whatever source derived.

(C) The State commission shall resolve each issue set forth in the petition and the response, if any, by imposing appropriate conditions as required to implement subsection (c) upon the parties to the agreement, and shall conclude the resolution of any unresolved issues not later than 9 months after the date on which the local exchange carrier received the request under this section.

(5) Refusal to negotiate The refusal of any other party to the negotiation to participate further in the negotiations, to cooperate with the State commission in carrying out its function as an

arbitrator, or to continue to negotiate in good faith in the presence, or with the assistance, of the State commission shall be considered a failure to negotiate in good faith.

(c) Standards for arbitration In resolving by arbitration under subsection (b) any open issues and imposing conditions upon the parties to the agreement, a State commission shall—

(1) ensure that such resolution and conditions meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title;

(2) establish any rates for interconnection, services, or elements according to subsection (d); and

(3) provide a schedule for implementation of the terms and conditions by the parties to the agreement.

(d) Pricing standards

(1) Interconnection and network element charges Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251 of this title, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section—

(A) shall be—

(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

(2) Charges for transport and termination of traffic

(A) In general For the purposes of compliance by an incumbent local exchange carrier with section 251(b)(5) of this title, a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless—

(i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and

(ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

(B)Rules of construction This paragraph shall not be construed—

(i) to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements); or

(ii) to authorize the Commission or any State commission to engage in any rate regulation proceeding to establish with particularity the additional costs of transporting or terminating calls, or to require carriers to maintain records with respect to the additional costs of such calls.

(3) Wholesale prices for telecommunications services For the purposes of section 251(c)(4) of this title, a State commission shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier.

(e) Approval by State commission

(1) Approval required Any interconnection agreement adopted by negotiation or arbitration shall be submitted for approval to the State commission. A State commission to which an agreement is submitted shall approve or reject the agreement, with written findings as to any deficiencies.

(2) Grounds for rejection The State commission may only reject—

(A) an agreement (or any portion thereof) adopted by negotiation under subsection (a) if it finds that—

(i) the agreement (or portion thereof) discriminates against a telecommunications carrier not a party to the agreement; or

(ii) the implementation of such agreement or portion is not consistent with the public interest, convenience, and necessity; or

(B) an agreement (or any portion thereof) adopted by arbitration under subsection (b) if it finds that the agreement does not meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title, or the standards set forth in subsection (d) of this section.

(3) Preservation of authority Notwithstanding paragraph (2), but subject to section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of an agreement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(4) Schedule for decision If the State commission does not act to approve or reject the agreement within 90 days after submission by the parties of an agreement adopted by negotiation under subsection (a), or within 30 days after submission by the parties of an agreement adopted by arbitration under subsection (b), the agreement shall be deemed approved. No State court shall have jurisdiction to review the action of a State commission in approving or rejecting an agreement under this section.

(5) Commission to act if State will not act If a State commission fails to act to carry out its responsibility under this section in any proceeding or other matter under this section, then the Commission shall issue an order preempting the State commission's jurisdiction of that proceeding or matter within 90 days after being notified (or taking notice) of such failure, and shall assume the responsibility of the State commission under this section with respect to the proceeding or matter and act for the State commission.

(6) Review of State commission actions In a case in which a State fails to act as described in paragraph (5), the proceeding by the Commission under such paragraph and any judicial review of the Commission's actions shall be the exclusive remedies for a State commission's failure to act. In any case in which a State commission makes a determination under this section, any party aggrieved by such determination may bring an action in an appropriate Federal district court to determine whether the agreement or statement meets the requirements of section 251 of this title and this section.

(f) Statements of generally available terms

(1) In general A Bell operating company may prepare and file with a State commission a statement of the terms and conditions that such company generally offers within that State to comply with the requirements of title and the regulations thereunder and the standards applicable under this section.

(2) State commission review A State commission may not approve such statement unless such statement complies with subsection (d) of this section and section 251 of this title and the regulations thereunder. Except as provided in section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of such statement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(3) Schedule for review The State commission to which a statement is submitted shall, not later than 60 days after the date of such submission—

(A) complete the review of such statement under paragraph (2) (including any reconsideration thereof), unless the submitting carrier agrees to an extension of the period for such review; or

(B) permit such statement to take effect.

(4) Authority to continue review Paragraph (3) shall not preclude the State commission from continuing to review a statement that has been permitted to take effect under subparagraph (B) of such paragraph or from approving or disapproving such statement under paragraph (2).

(5) Duty to negotiate not affected The submission or approval of a statement under this subsection shall not relieve a Bell operating company of its duty to negotiate the terms and conditions of an agreement under section 251 of this title.

(g) Consolidation of State proceedings Where not inconsistent with the requirements of this chapter, a commission may, to the extent practical, consolidate proceedings under sections 214(e), 251(f), 253 of this title, and this section in order to reduce administrative burdens on telecommunications carriers, other parties to the proceedings, and the State commission in carrying out its responsibilities under this chapter.

(h) Filing required A State commission shall make a copy of each agreement approved under subsection (e) and each statement approved under subsection (f) available for public inspection and copying within 10 days after the agreement or statement is approved. The State commission may charge a reasonable and nondiscriminatory fee to the parties to the agreement or to the party filing the statement to cover the costs of approving and filing such agreement or statement.

(i) Availability to other telecommunications carriers
A local exchange carrier shall make available any interconnection, service, or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement.

(j) "Incumbent local exchange carrier" defined
For purposes of this section, the term "incumbent local exchange carrier" has the meaning provided in section 251(h) of this title.